IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Robert Zambias *et al.*

Serial No.: 09/009,846   Group Art Unit: 1801

Filed: January 20, 1998   Examiner: to be assigned

For: LOGICALLY ORDERED   Attorney Docket No.:
      ARRAYS OF COMPOUNDS AND   5925-0061-999
      METHODS OF MAKING AND
      USING THE SAME

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. § 1.97

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

    In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the Patent Office of all references coming to the attention of Applicants or attorneys or agents for Applicants which are or may be material to the examination of the subject application, Attorneys for Applicants hereby invite the Examiner's attention to the references listed on the accompanying revised PTO Form 1449 entitled "List of References Cited".

    Identification of references listed on PTO Form 1449 is not to be construed as an admission of Applicants or attorneys for Applicants that such references are available as "prior art" against the subject application. Consequently, Applicants respectfully decline to use form PTO-1449, since this form identifies all of the references cited therein as "Prior Art." As an alternative, Applicants submit herewith a "revised form PTO 1449" entitled "List of References Cited" instead of "List of Prior Art Cited." The right is reserved to antedate any item in accordance with standard procedure.
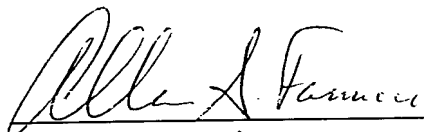
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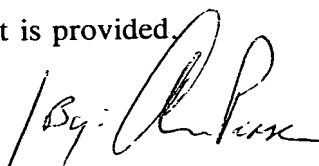
References cited in this "List of References Cited" were also cited by the Applicants in copending application Serial No. 09/009,844 filed January 20, 1998. Accordingly, copies of the cited references may be found in the file history of U.S. Serial No. 09/009,844.

Applicants believe that no fee is required with their submission, as the Information Disclosure Statement is being filed before the mailing of the first Office Action on the merits. However, if it is found that a fee is necessary, please charge the required fee to Pennie & Edmonds LLP Deposit Account No. 16-1150. A copy of this sheet is provided.

Respectfully submitted,

By: _____

Reg. No. P-42067

Allan A. Fanucci   30,256
                          (Reg. No.)

Dated: _May 12, 1998_

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Enclosure

		ATTY. DOCKET NO.		APPLICATION NO.
LIST OF REFERENCES CITED BY APPLICANT		5925-0061-999		09/009,846
(Use several sheets if necessary)		APPLICANT		
		Zambias *et al.*		
		FILING DATE		GROUP
		January 20, 1998		

05/12/98 Jc588 U.S. PTO

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4,631,211	12/23/86	Houghten			
	AB	5,010,175	04/23/91	Rutter *et al.*			
	AC	5,143,854	09/01/92	Pirrung *et al.*			
	AD	5,223,409	06/29/93	Ladner *et al.*			
	AE	5,225,533	06/06/93	Rutter *et al.*			
	AF	5,288,514	02/22/94	Ellman			
	AG	5,300,425	04/05/94	Kauvar			
	AH	5,324,483	06/28/94	Cody *et al.* (Reexamination Certificate Issued 09/24/96)			
	AI	5,359,115	10/25/94	Campbell *et al.*			
	AJ	5,367,053	11/22/94	Dooley *et al.*			
	AK	5,424,186	06/13/95	Fodor *et al.*			
	AL	5,449,754	09/12/95	Nishioka			
	AM	5,463,564	10/31/95	Agrafiotis *et al.*			
	AN	5,464,759	11/07/95	Coolidge *et al.*			
	AO	5,571,698	11/05/96	Ladner *et al.*			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AP	EP 0 604 552 B1	02/12/97	EPO				
	AQ	WO 90/15,070	12/13/90	PCT				
	AR	WO 91/17,271	11/14/91	PCT				
	AS	WO 91/19,735	12/26/91	PCT				

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	AT	WO 91/19,818	12/26/91	PCT				
	AU	WO 92/10,092	06/25/92	PCT				
	AV	WO 93/09,668	05/27/93	PCT				
	AW	WO 93/20,242	10/14/93	PCT				
	AX	WO 93/22,684	11/11/93	PCT				
	AY	WO 94/08,051	04/14/94	PCT				
	AZ	WO 94/08,711	04/28/94	PCT				
	BA	WO 95/02,566	01/26/95	PCT				
	BB	WO 95/16,209	06/15/95	PCT				
	BC	WO 95/32,425	11/30/95	PCT				
	BD	WO 96/23,749	08/08/96	PCT				

OTHER REFERENCES (*Including Author, Title, Date, Pertinent Pages, Etc.*)

	BE	Baldwin *et al.*, 1995, "Synthesis of a Small Molecule Combinatorial Library Encoded with Molecular Tags," J. Am. Chem. Soc. 117:5588-5589
	BF	Barbas *et al.*, 1993, "Direct selection of antibodies that coordinate metals from semisynthetic combinatorial libraries," Proc. Natl. Acad. Sci. U.S.A. 90:6385-6389
	BG	Boyce *et al.*, 1994, "Peptidosteroidal Receptors for Opioid Peptides. Sequence-Selective Binding Using a Synthetic Receptor Library," J. Am. Chem. Soc. 116:7955-7956
	BH	Brenner and Lerner, 1992, "Encoded combinatorial chemistry," Proc. Natl. Acad. Sci. U.S.A. 89:5381-5383
	BI	Bunin and Ellman, 1992, "A General and Expedient Method for the Solid-Phase Synthesis of 1,4-Benzodiazepine Derivatives," J. Am. Chem. Soc. 114:10997-10998
	BJ	Bunin *et al.*, 1994, "The combinatorial synthesis and chemical and biological evaluation of a 1,4-benzodiazepine library," Proc. Natl. Acad. Sci. U.S.A. 91:4708-4712
	BK	Burbaum *et al.*, 1995, "A paradigm for drug discovery employing encoded combinatorial libraries," Proc. Natl. Acad. Sci. U.S.A. 92:6027-6031
	BL	Campbell *et al.*, 1995, "A Transition State Analogue Inhibitor Combinatorial Library," J. Am. Chem. Soc. 117:5381-5382
	BM	Carell *et al.*, 1995, "New promise in combinatorial chemistry: synthesis, characterization, and screening of small-molecule libraries in solution," Chemistry and Biology 2:171-183
	BN	Chabala, 1995, "Solid-phase combinatorial chemistry and novel tagging methods for identifying leads," Current Opinion in Biotechnology 6:632-639

05/12/98

JC588 U.S. PTO

PEMP-98618.1

	BO	Chen et al., 1994, "'Analogous' Organic Synthesis of Small-Compound Libraries: Validation of Combinatorial Chemistry in Small-Molecule Synthesis," J. Am. Chem. Soc. 116:2661-2662
	BP	Cho et al., 1993, "An Unnatural Biopolymer," Science 261:1303-1305
	BQ	Christian et al., 1992, "Simplified Methods for Construction, Assessment and Rapid Screening of Peptide Libraries in Bacteriophage," J. Mol. Biol. 227:711-718
	BR	Cwirla et al., 1990, "Peptides on phage: A vast library of peptides for identifying ligands," Proc. Natl. Acad. Sci. U.S.A. 87:6378-6382
	BS	Desai et al., 1994, "Recent Advances in the Generation of Chemical Diversity Libraries," Drug Development Research 33:174-188
	BT	Devlin et al., 1990, "Random Peptide Libraries: A Source of Specific Protein Binding Molecul s," Science 249:404-406
	BU	DeWitt et al., 1993, "'Diversomers': An approach to non-peptide, nonoligomeric chemical diversity," Proc. Natl. Acad. Sci. U.S.A. 90:6909-6913
	BV	Ecker et al., 1993, "Rational screening of oligonucleotide combinatorial libraries for drug discovery," Nucleic Acids Res. 21:1853-1856
	BW	Eichler et al., 1994, "Cyclic Peptide Template Combinatorial Libraries: Synthesis and Identification of Chymotrypsin Inhibitors," Peptide Research 7:300-307
	BX	Ellman, 1996, "Design, Synthesis and Evaluation of Small-Molecule Libraries," Acc. Chem. Res. 29:132-143
	BY	Erb et al., 1994, "Recursive deconvolution of combinatorial chemical libraries," Proc. Natl. Acad. Sci. U.S.A. 91:11422-11426
	BZ	Fodor et al., 1991, "Light-Directed, Spatially Addressable Parallel Chemical Synthesis," Scienc 251:767-773
	CA	Freier et al., 1995, "Deconvolution of Combinatorial Libraries for Drug Discovery: A Model System," J. Med. Chem. 38:344-352
	CB	Furka et al., 1991, "General method for rapid synthesis of multicomponent peptide mixtures," Int. J. Peptide Protein Res. 37:487-493
	CC	Gallop et al., 1994, "Applications of Combinatorial Technologies to Drug Discovery. 1. Background and Peptide Combinatorial Libraries," J. Med. Chem. 37:1233-1251
	CD	Geysen and Mason, 1993, "Screening chemically synthesized peptide libraries for biologically-relevant molecules," Bioorganic & Medicinal Chemistry Letters 3:397-404
	CE	Geysen et al., 1987, "Strategies for epitope analysis using peptide synthesis," Journal of Immunological Methods 102:259-274

	CF	Gordon et al., 1994, "Applications of Combinatorial Technologies to Drug Discovery. 2. Combinatorial Organic Synthesis, Library Screening Strategies, and Future Directions," J. Med. Chem. 37:1386-1401
	CG	Han et al., 1995, "Liquid-phase combinatorial synthesis," Proc. Natl. Acad. Sci. U.S.A. 92:6419-6423
	CH	Houghten, 1985, "General method for the rapid solid-phase synthesis of large numbers of peptides: Specificity of antigen-antibody interaction at the level of individual amino acids," Proc. Natl. Acad. Sci. U.S.A. 82:5131-5135
	CI	Houghten et al., 1991, "Generation and use of synthetic peptide combinatorial libraries for basic research and drug discovery," Nature 354:84-86
	CJ	Jacobs and Fodor, 1994, "Combinatorial chemistry - applications of light-directed chemical synthesis," TIBTECH 12:19-26
	CK	Jung and Beck-Sickinger, 1992, "Multiple Peptide Synthesis Methods and Their Applications," Angew. Chem. Int. Ed. Engl. 31:367-383
	CL	Kerr et al., 1993, "Encoded Combinatorial Peptide Libraries Containing Non-Natural Amino Acids," J. Am. Chem. Soc. 115:2529-2531
	CM	Kick and Ellman, 1995, "Expedient Method for the Solid-Phase Synthesis of Aspartic Acid Protease Inhibitors Directed toward the Generation of Libraries," J. Med. Chem. 38:1427-1430
	CN	Krchňák and Lebl, 1995, "Synthetic library techniques: Subjective (biased and generic) thoughts and views," Molecular Diversity 1:193-216
	CO	Lam et al., 1991, "A new type of synthetic peptide library for identifying ligand-binding activity," Nature 354:82-84
	CP	Latham et al., 1994, "The application of a modified nucleotide in aptamer selection: novel thrombin aptamers containing 5-(1-pentynyl)-2'-deoxyuridine," Nucleic Acids Res. 22:2817-2822
	CQ	Martin et al., 1995, "Measuring Diversity: Experimental Design of Combinatorial Libraries for Drug Discovery," J. Med. Chem. 38:1431-1436
	CR	Moran et al., 1995, "Radio Frequency Tag Encoded Combinatorial Library Method for the Discovery of Tripeptide-Substituted Cinnamic Acid Inhibitors of the Protein Tyrosine Phosphatase PTP1B," J. Am. Chem. Soc. 117:10787-10788
	CS	Murphy et al., 1995, "Combinatorial Organic Synthesis of Highly Functionalized Pyrrolidines: Identification of a Potent Angiotensin Converting Enzyme Inhibitor from a Mercaptoacyl Proline Library," J. Am. Chem. Soc. 117:7029-7030
	CT	Needels et al., 1993, "Generation and screening of an oligonucleotide-encoded sythetic peptide library," Proc. Natl. Acad. Sci. U.S.A. 90:10700-10704
	CU	Nielsen et al., 1993, "Synthetic Methods for the Impl mentation of Encoded Combinatorial Chemistry," J. Am. Chem. Soc. 115:9812-9813

	CV	Nikolaiev *et al.*, 1993, "Peptide-Encoding for Structure Determination of Nonsequenceable Polymers Within Libraries Synthesized and Tested on Solid-Phase Supports," <u>Peptide Research</u> <u>6</u>:161-170
	CW	Ohlmeyer *et al.*, 1993, "Complex synthetic chemical libraries indexed with molecular tags," <u>Proc. Natl. Acad. Sci. U.S.A.</u> <u>90</u>:10922-10926
	CX	Ostresh *et al.*, 1994, "'Libraries from libraries': Chemical transformation of combinatorial libraries to extend the range and repertoire of chemical diversity," <u>Proc. Natl. Acad. Sci. U.S.A.</u> <u>91</u>:11138-11142
	CY	Pease *et al.*, 1994, "Light-generated oligonucleotide arrays for rapid DNA sequence analysis," <u>Proc. Natl. Acad. Sci. U.S.A.</u> <u>91</u>:5022-5026
	CZ	Pinilla *et al.*, 1994, "Investigation of antigen-antibody interactions using a soluble, non-support-bound synthetic decapeptide library composed of four trillion (4×10^{12}) sequences," <u>Biochem. J.</u> <u>301</u>:847-853
	DA	Posner *et al.*, 1994, "Catalytic antibodies: perusing combinatorial libraries," <u>TIBS</u> <u>19</u>:145-150
	DB	Scott, 1992, "Discovering peptide ligands using epitope libraries," <u>TIBS</u> <u>17</u>:241-245
	DC	Scott and Smith, 1990, "Searching for Peptide Ligands with an Epitope Library," <u>Science</u> <u>249</u>:386-390
	DD	Sepetov *et al.*, 1995, "Library of libraries: Approach to synthetic combinatorial library design and screening of 'pharmacophore' motifs," <u>Proc. Natl. Acad. Sci. U.S.A.</u> <u>92</u>:5426-5430
	DE	Simon *et al.*, 1992, "Peptoids: A modular approach to drug discovery," <u>Proc. Natl. Acad. Sci. U.S.A.</u> <u>89</u>:9367-9371
	DF	Staňkovà *et al.*, 1994, "Application of One-Bead One-Structure Approach to Identification of Nonpeptidic Ligands," <u>Drug Development Research</u> <u>33</u>:146-156
	DG	Stephen and Lane, 1992, "Mutant Conformation of p53: Precise Epitope Mapping Using a Filamentous Phage Epitope Library,"
	DH	Wallace *et al.*, 1994, "A Multimeric Synthetic Peptide Combinatorial Library," <u>Peptide Research</u> <u>7</u>:27-31
	DI	Wu *et al.*, 1994, "Identifying Substrate Motifs of Protein Kinases by a Random Library Approach," <u>Biochemistry</u> <u>33</u>:14825-14833
	DJ	Zuckermann *et al.*, 1994, "Discovery of Nanomolar Ligands for 7-Transmembrane G-Protein-Coupled Receptors from a Diverse *N*-(Substituted)glycine Peptoid Library," <u>J. Med. Chem.</u> <u>37</u>:2678-2685

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with **MPEP 609**; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.